

GIS and cartography supporting NEIU

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Geographers study place and location and these are critical to the success of an institution like ours with a (mainly) commuting student body. Our employees also often travel long distances to campus, and our 80,000 alumni are dispersed around the world but mainly still reside in the Chicago region. Many classes use the City and surrounding areas for field trips, internships and more. Our satellite campuses – El Centro, CCICS, Lake County College – add an additional dimension to our spatial challenges and opportunities. Underlying all this is a mosaic of neighborhoods, distinct socioeconomic and demographic areas, dense transportation infrastructure, rich community partnerships, political zones and regions, competing institutions, partner institutions, institutions, and more. Understanding the connection between these things can be invaluable helping the University survive and thrive in a changing and challenging time.

Using a series of maps and analyses conducted over the years we will illustrate how GIS can connect information from various sources – Institutional Research, Enrollment Services, Human Resources, Facilities, Events, Alumni Affairs, Marketing, Development, the census bureau, counties, municipalities, and more to better understand what we do so well and perhaps how to do it even better.

By using location as a relational link between otherwise disconnected databases we can ask (and answer) interesting questions. How far do students travel to get to campus, how long does it take by various modes? How much of the city can you get to from NEIU easily by public transportation? Where do the NEST residents come from and how has that changed in recent years? What types of neighborhoods do we serve best, which high schools and colleges send us students? Where do students in different majors come from? When applicants to NEIU go elsewhere, where do they go? Where might we turn to attract new enrollments? How is it that NEIU one of the safest campuses in the U.S.?

At this session you will see the distribution of students, NEST occupants, alumni by major, employees, high schools, other colleges and universities, transportation infrastructure, neighborhoods, and the populations which are most relevant to NEIU. You will also see how GIS has been used on campus to enrich the educational experience. The session will explain how Geographic Information Systems can map data of various formats, will include a series of illuminating applications which student and faculty in the Department of Geography and Environmental Studies have used to help Northeastern in recent years. And it will explain how students at NEIU can add GIS to their toolbox, and apply these skills to many fields of study.